

What is claimed is:

sub a) ~~1. A playback apparatus to perform a playback operation on a storage medium in which audio data and catalog information related to the audio data are recorded, wherein the catalog information comprises common catalog data for information commonly applied for the entire audio data recorded on the storage medium, and title catalog data having information corresponding to distinct items of the audio data, the playback apparatus comprising:~~

~~a decoding unit to decode the audio data, the common catalog data and the title catalog data;~~

~~a storage device to store the common catalog data and the title catalog data of the audio data which is to be played back; and~~

~~a controller to control the decoding unit and the storage device, so as to simultaneously decode the audio data to be played back and the common catalog data and the title catalog data corresponding to the audio data to be played back.~~

~~2. The playback apparatus of claim 1, wherein the controller stores the common catalog data and the title catalog data of the audio data which is to be played back prior to playing back the audio data.~~

~~3. The playback apparatus of claim 1, wherein catalog playback information is stored on the storage medium, and the controller distinguishes whether the catalog playback information exists in the storage medium by defining file names of the catalog playback information, defining a region of the storage medium predetermined by a physical or logical address designated as a space for storing the catalog playback information, or defining information indicating whether of a file exists in which the catalog playback information is stored and a location of the file in a volume information region, during the playback operation.~~

~~4. A playback apparatus to perform a playback operation on a storage medium in which audio data and catalog information related to the audio data are recorded, wherein the catalog information comprises common catalog data for information commonly applied for the entire audio data recorded on the storage medium, and title catalog data having information corresponding to distinct items of the audio data, the playback apparatus comprising:~~

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a storing unit which stores the common catalog data, the title catalog data and additional information relating to the audio data;
a video decoder which decodes the common catalog data, the title catalog data and the additional information, to generate a restored image;
an audio decoder which decodes the audio data, to generate restored audio signals;
and
a controller which controls playback of the common catalog data and the title catalog data corresponding to a selection of a user.

5. The playback apparatus of claim 4, wherein the controller reads the common catalog data and the title catalog data from the storing unit in a predetermined sequence.

6. The playback apparatus of claim 4, wherein the common catalog data and the title catalog data stored in the storing means are defined within a predetermined size.

7. The playback apparatus of claim 4, wherein a data size of a sum of the common catalog data and data of one title catalog from a plurality of title catalogs which form the title catalog data is smaller than a capacity of the storing unit.

8. The playback apparatus of claim 4, wherein the restored image is a still picture for background display, and the additional information is a sub-picture for transferring characters.

9. The playback apparatus of claim 4, wherein the video decoder decodes the common catalog data and the title catalog data according to a standard digital versatile disk-video (DVD-Video) specification.

10. The playback apparatus of claim 4, wherein catalog playback information is stored on the storage medium, the catalog playback information includes a file identifier and an audio presentation information table determining a location of the common catalog data and the title catalog data to be played back corresponding to a predetermined time in accordance with real-time playback information of audio obtained from the audio data during real-time playback, wherein if a user does not enter a catalog selection command for a given time during a playback mode of the audio data, the controller reads the audio information table to extract the corresponding common catalog data and the title catalog data of the audio data being played back.

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11. A playback apparatus to perform a playback operation of encoded audio data and encoded catalog information related to the audio data, wherein the encoded audio data encoded catalog information and the encoded catalog playback information are stored on a storage medium, and the catalog information comprises common catalog data for information commonly applied for the entire audio data recorded on the storage medium, and title catalog data having information corresponding to distinct items of the audio data, the playback apparatus comprising:

an optical pickup which reads the encoded audio data, the common catalog data and the title catalog data; and

a decoding unit which decodes the encoded audio data, the encoded common catalog data and the encoded title catalog data read from the storage medium.

12. The playback apparatus according to claim 11, further comprising:

a storage device which stores the read encoded common catalog data and title catalog data, prior to the optical pickup reading the encoded audio data from the storage medium.

13. The playback apparatus according to claim 12, further comprising:

a controller which controls playback of the encoded common catalog data and the title of the encoded title catalog data corresponding to a selection of a user and the read encoded catalog playback information.

14. A playback apparatus for playing back catalog information relating to DVD-audio and the DVD-audio, wherein the catalog information and the DVD-audio are stored on a DVD, and the catalog information comprises common catalog data for information commonly applied for the entire audio data recorded on the storage medium, and title catalog data having information corresponding to distinct items of the audio data, the playback apparatus comprising:

an optical pickup which reads the DVD-audio and the corresponding common catalog data and title catalog data; and

a processor which reproduces the common catalog data and title catalog data using an editing system for DVD-video and the DVD-audio.

15. The playback apparatus according to claim 14, wherein the DVD stores DVD-video, and the processor reproduces the DVD-video according to the editing system for the DVD-video.

16. A recording apparatus to perform a recording on a storage medium, comprising:

an encoding unit to encode audio data and catalog information related to the audio data, wherein the catalog information comprises common catalog data for information commonly applied for the entire audio data recorded on the storage medium, and title catalog data having information corresponding to distinct items of the audio data; and

an optical pickup to recording the encoded audio data, and the encoded common catalog data and title catalog data.

17. The recording apparatus according to claim 16, wherein the encoding unit encodes catalog playback information, the optical pickup records the encoded audio data, common catalog data and title catalog data in accordance with the catalog playback information, the recording apparatus further comprising a controller which defines file names of the common catalog data and title catalog data for storage on the storage medium, defines a region of the storage medium predetermined by a physical or logical address designated as a space for storing the catalog playback information, or defines information indicating whether a file exists on the storage medium in which the catalog playback information is stored and a location of the file in a volume information region of the storage medium.

18. The recording apparatus according to claim 16, wherein:
the encoding unit encodes video data representing an image which is a still picture relating to the audio data, and additional information which represents a sub-picture for transferring characters; and
the optical pickup records the encoded video data and the encoded additional information on the storage medium.

19. The recording apparatus according to claim 16, wherein the encoding unit encodes the common catalog data and title catalog data according a standard digital versatile disk-video (DVD-video) specification.

20. The recording apparatus according to claim 16, wherein the optical pickup records the common catalog data and title catalog data in an image information region of a volume space of the storage medium, and records the audio data in an audio region of the storage medium.

21. The recording apparatus according to claim 17, wherein the optical pickup records the common catalog information and the title catalog information in an image title set of the image information region, and the optical pickup records the catalog playback information in an audio management region of the audio region and distinct items of the audio data in respective audio title sets of the audio region.

22. The recording apparatus according to claim 21, wherein the title catalog information is divided in distinct title catalog information corresponding to the respective ones of the distinct items of the audio data, and the optical pickup records the distinct title catalog information into respective program chains of the image title set.

23. The recording apparatus according to claim 17, wherein the catalog playback information comprises locations of image information in which the common catalog data and the title catalog data are recorded, a file identifier, and an auto presentation information table in which is stored the locations of one item of the common catalog data and the title catalog data to be played back corresponding to a predetermined time according to real-time playback information of the audio data obtained by real-time playback of the audio data.

24. The recording apparatus according to claim 22, wherein the catalog playback information comprises locations of image information in which the catalog information is recorded, a file identifier, and an auto presentation information table in which is stored the locations of one item of the catalog information to be played back corresponding to a predetermined time according to real-time playback information of the audio data obtained by real-time playback of the audio data, the file identifier comprises a plurality of program chain numbers corresponding to the program chains of the common catalog information and the title catalog information, catalog pointers pointing to locations on the storage medium of the program chains, and the auto presentation table has playback time information which appropriately and automatically plays back the catalog information, using the real-time playback information obtained from the audio data while each recorded item of the title catalog information is played back, and information on the playback location of the catalog

information, so that the auto presentation information table has information on still pictures and sub-pictures to be played back within the catalog information when a user has not input commands while one item of the title catalog information is played back.

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25. The recording apparatus according to claim 17, wherein the optical pickup records the common catalog information and the title catalog information in an image title set of an image information region of the storage medium, and the optical pickup records the catalog playback information in a predetermined information region of an audio file and distinct items of the audio data in respective audio title sets of an audio region of the storage medium.

26. The recording apparatus according to claim 16, wherein the title catalog information is divided in distinct title catalog information corresponding to respective ones of distinct items of the audio data, and the optical pickup records the distinct title catalog information into respective program chains of an image title set on the storage medium.

27. The recording apparatus according to claim 16, further comprising:
a decoding unit which decodes the encoded audio data and the encoded common catalog data and title catalog data read from the storage medium;
wherein the optical pickup reads the encoded audio data, common catalog data and title catalog data.

28. The recording apparatus according to claim 17, further comprising:
a storage device which stores the common catalog data and title catalog data of the audio data which is to be played back; and
a controller which controls the decoding unit and the storage device, so as to simultaneously decode the audio data to be played back and the common catalog data and title catalog data corresponding to the audio data to be played back in accordance with the catalog playback information;

wherein the controller distinguishes whether the catalog playback information exists in the storage medium by defining file names of the catalog playback information, defining a region of the storage medium predetermined by a physical or logical address designated as a space for storing the catalog playback information, or defining information indicating whether a file exists in which the catalog playback information is stored and a location of the file in a volume information region, during the playback operation.

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